Pest Update (May 2, 2012)

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Note: samples containing living tissue may only be accepted from South Dakota. Please do <u>not</u> send samples of dying plants or insects from other states. If you live outside of South Dakota and have a question, instead please send a digital picture of the pest or problem. **Walnut samples may not be sent in from any location – please provide a picture!**

Available on the net at:

http://sdda.sd.gov/Forestry/Educational-Information/PestAlert-Archives.aspx

Any treatment recommendations, including those identifying specific pesticides, are for the convenience of the reader. Pesticides mentioned in this publication are generally those that are most commonly available to the public in South Dakota and the inclusion of a product shall not be taken as an endorsement or the exclusion a criticism regarding effectiveness. Please read and follow all label instructions and the label is the final authority for a product's use on a particular pest or plant. Products requiring a commercial pesticide license are occasionally mentioned if there are limited options available. These products will be identified as such but it is the reader's responsibility to determine if they can legally apply any product identified in this publication.

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Plant development



We are still ahead of plant development this year due to the mild winter and early spring. The oakleaf mountainash were in bloom last week as well as the vanhoutee spireas, about two weeks ahead of schedule. This means that we have to move up the chock on a number of gardening tasks, and yes, expect to start spraying a little earlier for clearwing ash borers and codling moth among other activities.

Current tasks



Clearwing ash borer treatment with an insecticide containing permethrin as an active ingredient can begin in another week. The bark must be sprayed to protect the tree as the insecticide will kill the adults as they are walking on the bark while laying eggs. The insecticide will also kill the newly hatched larvae before they burrow into the wood. Systemic treatments are generally ineffective so injecting a pesticide or

pouring one around the soil are not practical means of managing this particular borer. The adults are usually out flying about a week or so after Vanhouttee spireas begin to bloom and the shrub began flowering last week. Spraying should begin now.



Diplodia tip blight second application should be applied. Tip blight is probably the most common disease of pines, particularly Austrian pine. Symptoms in early summer are the new needles becoming brown and stunted. Twigs may be infected and become stunted and deformed. The treatment is a fungicide containing thiophanatemethyl, propriconazole or chlorothalonil (labeled for control of this disease) just before the buds sheaths

have opened and that was last week. Timing is critical, once the bud sheaths have opened and the candle begins to form, it's a little late to begin the first application and this is the one that provides most of the protection. If you did the first one on time, it's about time to apply the second application.



Zimmerman pine moth larvae will become active soon and begin burrowing into the wood. Infested trees typically have masses (appear as big globs of bubble gum) of reddish pitch near branch attachments. Treating the bark on the tree with an insecticide containing permethrin as the active ingredient is the most effective means of control. The chemical must be applied to the bark on the trunk so it is critical to make use the pressure of

the sprayer is sufficient to penetrate the canopy.

Tasks to do in another week...

Codling moth – the larvae of this insect burrow into the apple, usually near the base of the fruit, resulting in a trail through the apple filled with brown, powdery frass. This frass often extrudes from the entry hole. Treatment is usually an application of malathion sprayed about 10 days after petal fall and then 3 more applications spaced about 10 days apart. Do not spray insecticides on apple trees while they are in bloom! You will kill the pollinators. If you are using a general fruit multi-purpose spray, it probably has an insecticide in it so these sprays should also not be applied during bloom; however, we are just beyond flowering for most apple trees at this time.

Current Concerns



The mild, but dry, winter is beginning to show up on arborvitaes around the state. The warm, dry winter and spring (but it's beginning to rain now) resulted in a lot of desiccation injury on arborvitaes and yews. The injury really does not begin to show up until the plant begins to green up and then the drying tissue becomes evident. The brown foliage should be removed and pruned back to green foliage. If after pruning out the brown foliage there is only a

bare branch, prune the branch back to the trunk. Arborvitaes and yews will not send out new shoots from stubs.

Mountain pine beetle development is right on schedule for the year and an earlier flight is not expected. A check of the broods beneath the bark last week revealed that the insect is still in the larval stage (the white, almost rice grain spots in the picture on the next page) and no pupae or callow adults were found. This is consistent with what has been found during monitoring



development in past years and unless the spring and early summer become much warmer than normal, the flight should begin in early July with the peak about 3 to 4 weeks later, just before Rally week. The only difference observed this year is a few more overwintering adults have been noticed, not too surprising considering the mild winter. However, these adults do not pose a threat to trees.

While there is little concern about the beetles flying early, there is some concern that landowners will wait too long to begin spraying their trees to protect them from attack later this summer. There will probably be an abundance of beetles flying this year and valuable pines near cabins and homes should probably be sprayed if they are near, within a few miles, of an active infestation. The sprays only work to kill the beetles as they begin to attack the tree, there are no effective pesticide treatments to kill the beetles once they have entered the bark. While landowners can do this work themselves, commercial spray companies have the equipment and chemicals that can provide better coverage and protection.

E-samples



leaves falling prematurely.

I got a great picture of cedar-apple rust sent in by Dave Hettick, a forester with the South Dakota Department of Agriculture. The gelatinized telia horns developing on the gall are a good indicator that spores are soon to be released. These spores carried by the wind and any that land on apple leaves will germinate to begin causing the disease. The infected leaves will develop rust spots on the upper and lower surface with severely infected



Look at this find! A reader sent in pictures from their recent mushroom hunt (from an undisclosed location, of course!). If you are not familiar with these mushrooms, they are known as morels, the sponge mushroom, and are excellent when cooked (or dried to be used for later). Morels are among the "fool proof four" and along with puffballs, sulphur fungus and shaggymanes, are easy to

identify. This is important as a misidentification of a fungus, even if cooked, can lead to a bad tummy ache or death. Morels are hard to confuse with their conical caps indented with irregular pits that makes the cap almost appear as a sponge. Morels only appear for a week or two in the spring, often about the time lilacs are in bloom. They tend to come up in the same spot every year so almost every morel hunter has a secret spot or two. IMPORTANT: while morels are easy to identify it is always a good idea to go mushroom hunting with an experienced person for the first couple of times just to be sure you are collecting the right mushrooms, pictures are not enough.



Sapsuckers are at their work again drilling holes in pines and other trees across the state. I received this picture from Gregory County Conservation District last week. While often confused with insect, but the uniform line of holes is a good means of separating insect damage from that caused by sapsuckers. The birds will drill into pines, maples, birch and apple, among other trees, to cause the sap to flow.

They tend to create holes in deciduous trees in the spring and conifers in the fall. Sapsuckers usually do not kill the tree, though repeated attacks over several years can result in mortality of young trees.

Samples received

Davison County FL1200009 falling off.

Dying spruce, the needles are

The sample was merely dead tissue and there was no other information provided so I have a call into the tree owner.

Hughes County FL1200010 Declining Rocky Mountain junipers. The new tips are turning yellow and the shoot tips from last year are ash-gray.

This is phomposis twig blight. It is a common disease of eastern redcedar and Rocky Mountain juniper and results in numerous dead shoot tips though rarely kills the tree. The disease can be confused with Kabatina twig blight which produces similar symptoms but the browning usually occurs earlier in the year. The fruiting structures differ and this is the best means of identification. Phomopsis can be treated with fungicides containing copper or propriconazole at 14-day intervals beginning in mid-May and continuing until growth ceases or dry weather begins.

Jackson County What is this shrub? The leaves are almost willow-like. Are the fruits edible?

This is the western sand cherry (*Prunus besseyi*). The plant has narrow leaves so does look a little like a willow. The plant was in bloom in Brookings a

couple of weeks ago and every branch was covered with the small white flowers. The fruit, an almost black, $\frac{1}{2}$ inch, drupe ripens in late July and they are frequently used in jams and jellies.

You also mentioned trees that had not leafed out, except at the base, but the inner bark was still green. Most likely the buds were killed by that cold snap we had a while ago. They may still bud out this year so wait another few weeks before removing.

Minnehaha County FL1200011 The needles on this spruce keep falling off, mostly on the lower half of the tree.

Longtime readers of this publication probably already know this is most likely due to cytospora canker. Unfortunately the samples, a bag of dead and bare shoot tips did not help much so I will stop to see the tree this week – stay tune.

Perkins County

This is a pine branch from a tree near the Bison school athletic field. Some of the trees have brown needles, others with just brown tips and banding. Is this Dothistroma needle blight?

The symptoms are similar to needle blight but there were no fruiting structures to confirm the disease and the symptoms are also what I see for deicing salt injury. Any chance that the trees were near a paved area?